

SKF Y-bearings for agricultural applications

A full range to enhance performance and reduce management and ownership cost



Growing opportunities in agriculture

With the expanded range of SKF Y-bearings

Discover what you can achieve with SKF Y-bearings – developed specifically for agricultural applications. The expanded range includes the ideal solution for each application and specific machine design, making it possible to build more value into the machine design, reduce warranty costs, reduce the number of suppliers – and stay ahead of the competition.



Improve performance and farm productivity

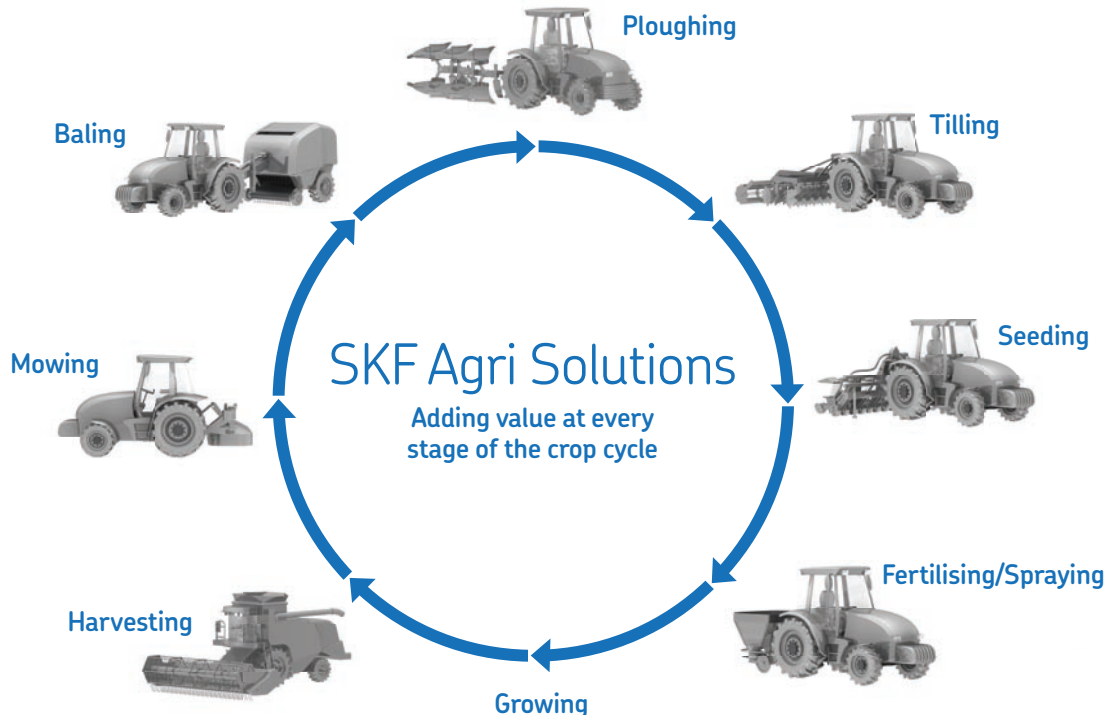
- Dedicated solutions for agricultural applications
- Long and reliable component service life
- High performance sealing solutions – tested and well proven
- Built in reliability helps extend warranty periods
- Enhances your brand image on the market

Reduce management cost
























- Reduce warranty cases and associated costs
- Fewer service engineers in the field and call backs to distributors
- Wide, dedicated range reduces engineering and development time and costs
- Fewer suppliers for greater efficiency and cost-effectiveness

Reduce machine ownership cost

- Reduce replacement time and repair costs
- Plug & play unit with fewer components for quick and easy mounting
- Less unplanned downtime
- Increase farm productivity and profitability



SKF Y-bearing units for agricultural applications



















| | | Bearings | | | | | | | | | | | | |
|----------|---|---|---|---|---|--|---|---|---|---|---|--|----------------------|--|
| | |  |  |  |  |  |  |  |  |  |  | | | |
| | | YEL 2 -2F | YEL 2-2F/VL065 (1) | YELAG 2 | YET 2 | YAR 2-2F | YAR 2 -2RF | YARAG 2 | YSPAG 2 | YSP 2 SB -2F | YSA 2-2FK | | | |
| Housings | Cast iron |  SY | SY.. WF 20-60 mm 1 7/16-1 15/16 in. | | SY.. WDW 20-50 mm 1-1 15/16 in. | SY.. FM 15-60 mm | SY.. TF 12-65 mm 3/2-2 15/16 in. | SY.. TR 20-60 mm | SY.. TDW 20-50 mm 1-1 15/16 in. | SY.. LDW 25-50 mm 1-1 15/16 in. | SY.. LF 25-60 mm 1-2 11/16 in. | | | |
| | |  SYJ | | | | | SYJ.. TF 20-200 mm 3/4-2 3/4 in. | | | | | | SYJ.. KF 20-60 mm | |
| | |  SYF | | | | SYF.. FM 20-50 mm | SYF.. TF 20-50 mm | | | | | | | |
| | |  FY | FY.. WF 20-60 mm 1-2 7/16 in. | | FY.. WDW 20-50 mm 1-1 15/16 in. | FY.. FM 15-60 mm | FY.. TF 12-65 mm 3/2-2 15/16 in. | FY.. TR 20-60 mm | FY.. TDW 20-50 mm 1-1 15/16 in. | FY.. LDW 25-50 mm 1-1 15/16 in. | FY.. LF 25-60 mm 1-2 11/16 in. | | | |
| | |  FYJ | | | | | FYJ.. TF 20-200 mm | | | | | | | FYJ.. KF 20-60 mm |
| | |  FYTB | FYTB.. WF 20-50 mm | | FYTB.. WDW 20-50 mm 1-1 15/16 in. | FYTB.. FM 15-50 mm | FYTB.. TF 12-50 mm 3/4-1 3/4 in. | FYTB.. TR 20-50 mm | FYTB.. TDW 20-50 mm 1-1 15/16 in. | FYTB.. LDW 25-50 mm 1-1 15/16 in. | FYTB.. LF 25-60 mm 1-2 3/16 in. | | | |
| | |  FYTJ | | | | | FYTJ.. TF 20-50 mm 3/4-1 3/4 in. | | | | | | | FYTJ.. KF 20-45 mm 3/4-1 3/4 in. |
| | |  FYC | | | | | FYC.. TF 20-65 mm | | | | | | | |
| | |  TU | | | | TU.. FM 20-55 mm | TU.. TF 20-55 mm 3/4-2 3/16 in. | | | | | | | |
| |  TUJ | | | | | TUJ.. TF 20-60 mm | | | | | | | | |
| | Composite |  SYK | | | | | SYK.. TF 20-40 mm | SYK.. TR 20-40 mm | | | | | | |
| | |  FYK | | FYK.. WR/VL065 20-40 mm | | | FYK.. TF 20-40 mm | FYK.. TR 20-40 mm | | | | | | |
| | |  FYTBK | | | | | FYTBK.. TF 20-35 mm | FYTBK.. TR 20-35 mm | | | | | | |

Note:

- pressed steel housings available as spare parts.
- where not indicated separate housings/bearings available on demand.

WF Y-bearing with an eccentric locking collar, YEL 2 series, -2F seals
 WR Y-bearing with an eccentric locking collar, YEL 2 series, -2RF seals
 WDW Y-bearing with an eccentric locking collar, YELAG 2 series, 5-lip seals
 FM Y-bearing with an eccentric locking collar, YET 2 series, standard seals
 TF Y-bearing with grub screws, YAR 2 series, -2F seals
 TR Y-bearing with grub screws, YAR 2 series, -2RF seals
 TDW Y-bearing with grub screws, YARAG 2 series, 5-lip seals
 LDW Y-bearing with SKF ConCentra locking, YSPAG 2 series, 5-lip seals
 LF Y-bearing with SKF ConCentra locking, YSP 2 SB series, -2F seals
 KF Y-bearing with a tapered bore, YSA 2K series, -2F seals
 (1) VL065: zinc coated inner bore and side faces

SKF Y-bearings for agricultural applications

| | | Sealing systems | | | | |
|----------|---|---|---|---|---|---|
| | |  |  |  |  |  |
| | | Sizes | Sizes | Sizes | Sizes | Sizes |
| Y-series |  YEL 2 | | | 20-60 mm 3/2-1 3/8 in. | 20-40 mm (2) | |
| |  YET 2 | | 15-60 mm 3/2-1 3/8 in. | | | |
| |  YAR 2 | | | 12-100 mm 1/2-2 in. | 20-65 mm 3/4-2 in. | |
| |  YARAG 2 | | | | | 20-50 mm(1) 1-1 15/16 in. |
| |  YELAG 2 | | | | | 20-50 mm(1) 1-1 15/16 in. |
| |  YSPAG 2 | | | | | 25-50 mm(1) 1-1 15/16 in. |
| |  YSP 2 SB | | | 25-60 mm 1-2 11/16 in. | | |
| |  YAT 2 | | | 17-50 mm 5/8-2 in. | | |
| |  YSA 2K | | | 25-65 mm 3/4-2 3/8 in. | | |
| |  17262(00) | 17-60 mm | | | | |
| |  17262(00) relub | | 17-60 mm | | | |
| |  17263(00) | 25-50 mm | | | | |
| |  17263(00) relub | | 25-50 mm | | | |

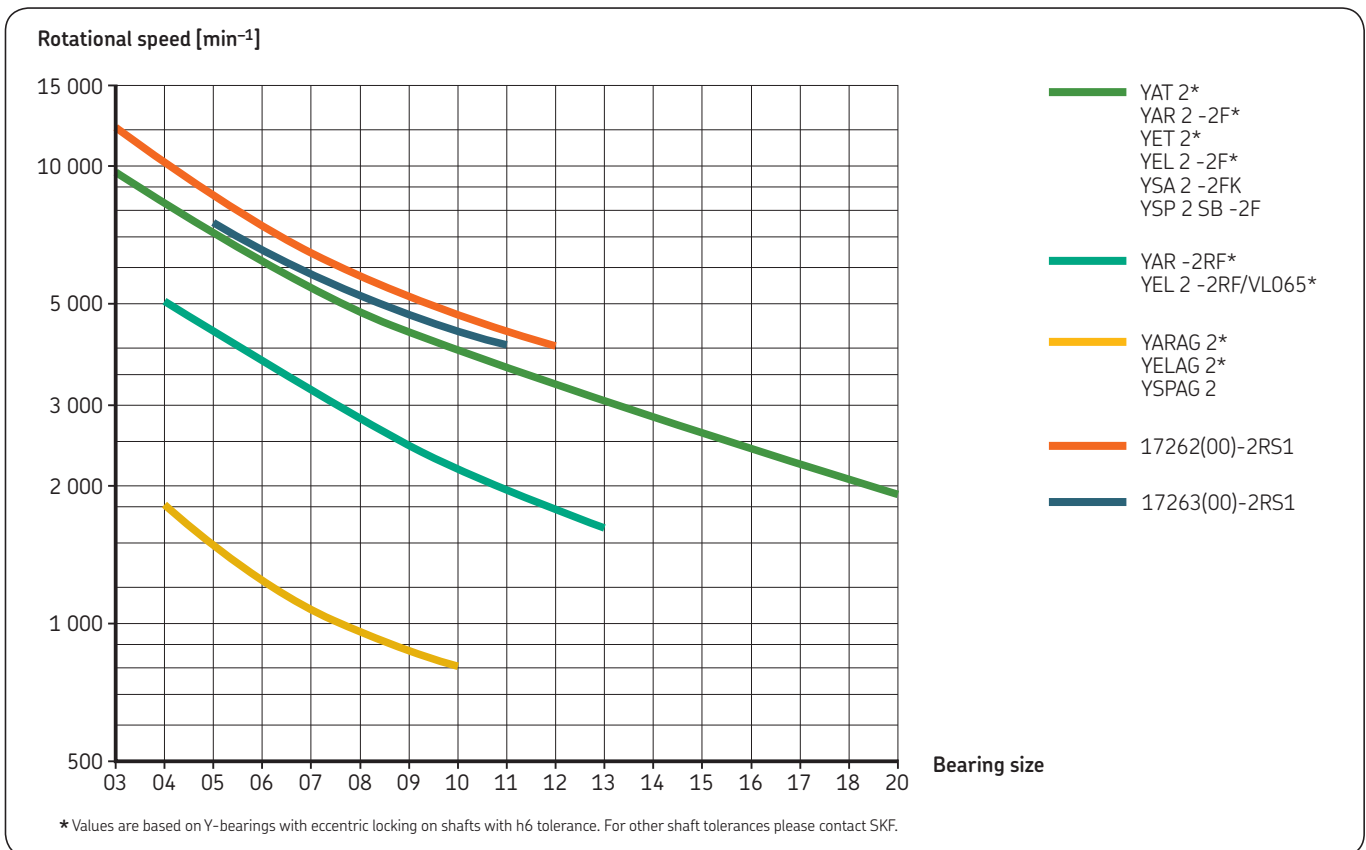
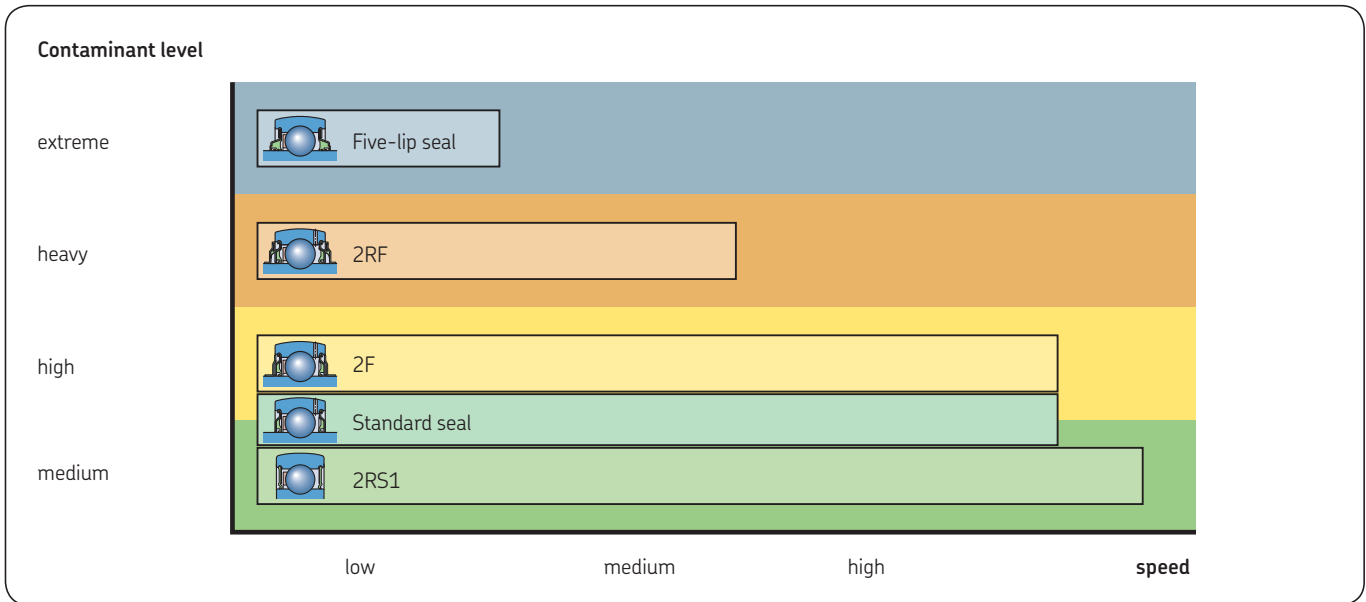
For more information about the full range of SKF Agri Solutions for the agriculture industry, contact your SKF representative, or visit www.skf.com/agrisolutions

- no relubrication hole, maintenance free offer
- VL065 suffix, zinc coated inner bore and side faces
- suffix -2RS1/VP274

Note: Other bearing variants available.
 C suffix = OR cylindrical
 W suffix = no lubrication hole
 U suffix = no locking collar
 VL244 = zinc coated rings

We've got you covered

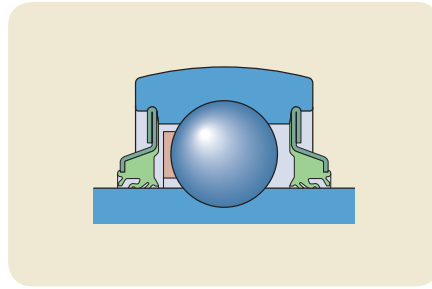
This guide shows the scope of the SKF Y-bearing range and gives an indication of the intended applications. For the optimal solution for your specific application, be sure to contact your local SKF representative. As your engineering and design partner, we look forward to working together with you and provide support in every way possible.



SKF seals for agriculture applications

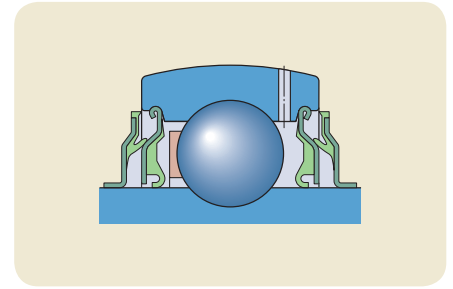
Sealing solutions designed and tested for high performance

SKF high performance sealing solutions provide proven reliability in tough working environments – helping to reduce ownership costs and enhance farm productivity.



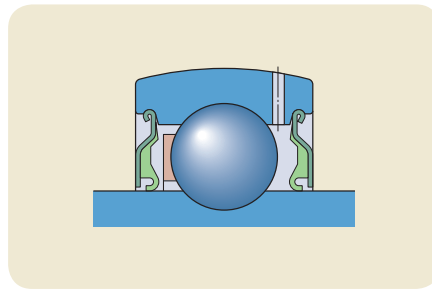
Five-lip seal

The five-lip seal within SKF agricultural Y-bearing units is suitable for extreme contaminated environment and where long service life is required. It consists of a stamped steel insert, with a vulcanized five-lip patented seal made from a low friction compound.



2RF seal

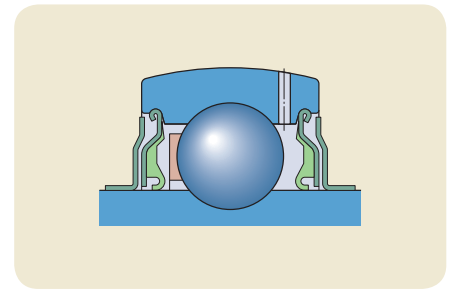
Where operating conditions are heavily contaminated and long service life is required, Y-bearing units with the highly efficient multiple seal are recommended. Here, the sealing efficiency of the standard integral seal is reinforced by a steel flinger with a vulcanized sealing lip.



2F seal

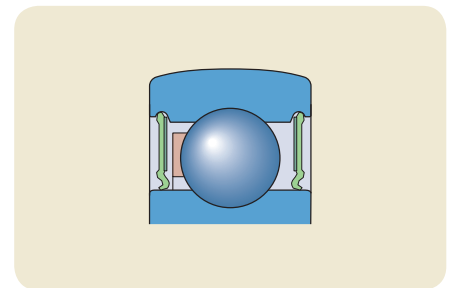
For high contaminated conditions, Y-bearing units fitted with plain steel flingers outside the integral seal should be used.

The flingers have an interference fit on the inner ring and considerably enhance the sealing effect without increasing friction.



Standard seal

Suitable for medium to high contaminated conditions the standard integral seal used in SKF Y-bearing units provides good protection against moisture and contaminants and also provides reliable retention of the lubricant.

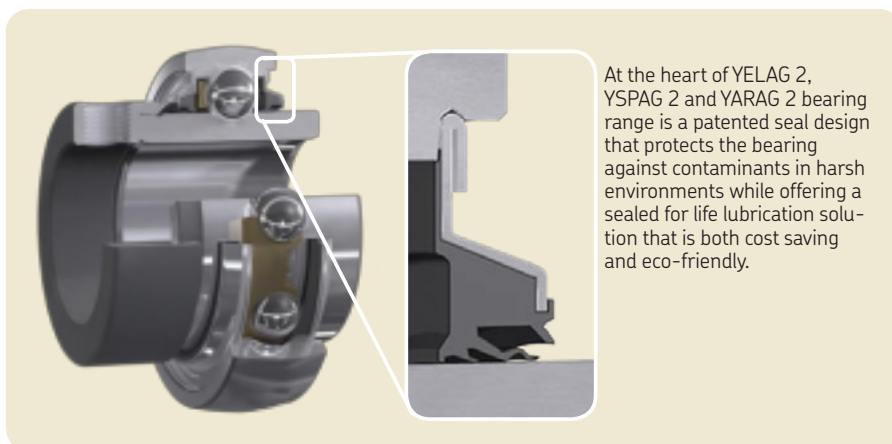


2RS1 seal

The 2RS1 seal is recommended for medium contaminated conditions and allows the highest speed among the seals available for SKF Y-bearings for agricultural applications. This contacting seal is integral to Y-bearings with a normal inner ring in the 17262(00)-2RS1 and 17263(00)-2RS1 series.

Five-lip seals deliver several benefits

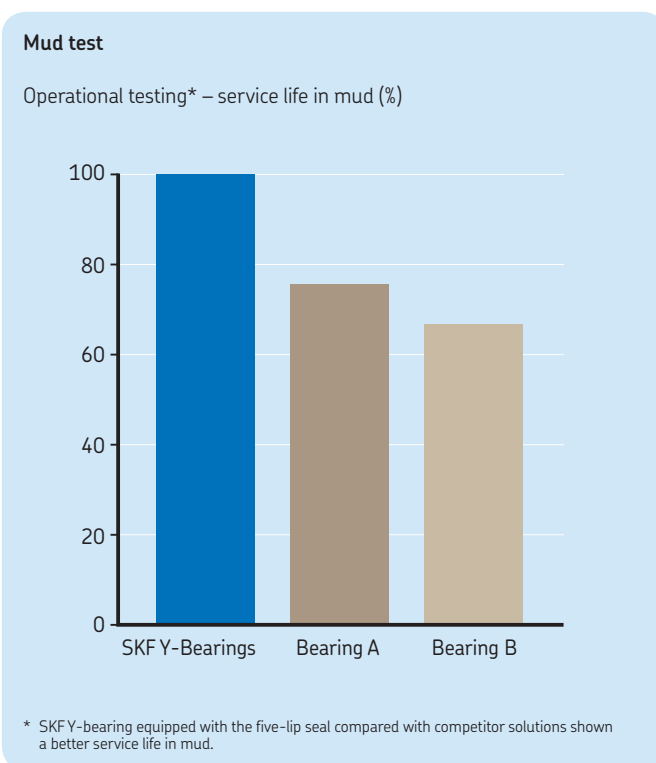
- The steel insert protects the bearings from solid contaminants, anchoring the complete, vulcanized seal to the bearing outer ring.
- Each lip of the vulcanized seal features a different design to provide superior sealing performance in response to different operating conditions, including ring misalignment.
- The outermost and innermost lips act as a labyrinth, preventing contaminant ingress and grease leakage, respectively.
- The three inner lips retain constant contact with the inner ring shoulder.



Testing results

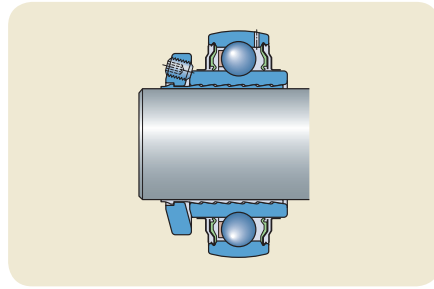
SKF agricultural Y-bearings with the five-lip seal are subjected to a series of extensive laboratory and field tests.

| Test type | Purpose | Passed |
|---------------------|---------------------------------------|--------|
| | Check seal performance against | |
| Mud | Extreme wet contaminated conditions | ✓ |
| Dust | Fine and dry particles | ✓ |
| Vegetable fibre | Processed media | ✓ |
| Sand and stones | Heavy and dry particles | ✓ |
| Friction | Rotational speed | ✓ |
| Climatic cell | Diverse speed and running temperature | ✓ |
| High pressure water | Machine cleaning conditions | ✓ |
| High air pressure | Machine cleaning conditions | ✓ |



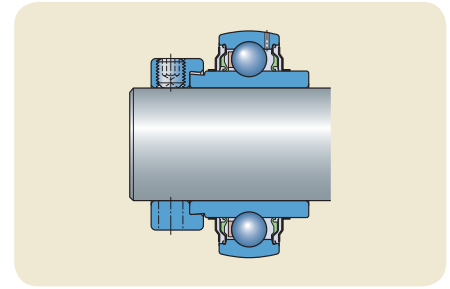
Locking methods

The SKF Y-bearings for agriculture applications are offered with five different locking methods. Combined with the sealing systems offered, they define a very wide range of solutions able to meet all the agricultural application requirements in term of loads, speeds and environment conditions.



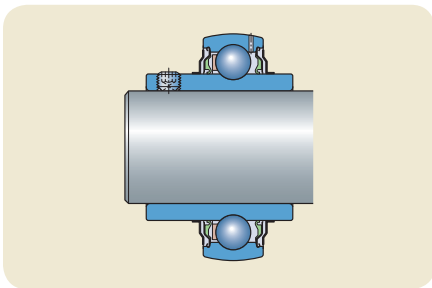
SKF ConCentra locking

This SKF patented method, enables a true concentric locking on the shaft. It allows an easy, quick and reliable mounting and it is recommended for demanding applications in term of loads and speeds. The SKF ConCentra method, is the best solution to solve locking issues like fretting corrosion or locking loosening. Thanks to the true concentric locking the bearing limiting speeds are not affected by the shaft tolerance and the maximum values can be achieved even using commercial grade shafts obtaining always low levels of both vibration and noise.



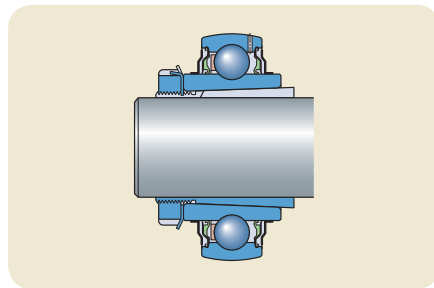
Eccentric locking collar

This locking method is the most commonly used in agriculture applications. This method, allowing an easy and quick mounting and dismounting, is provided by a locking collar acting on the eccentric extension made on one side of the inner ring. The locking is achieved by turning the locking collar in the direction of rotation till the system is locked. A single grub screw further secures the locking collar to the shaft. Even if the eccentric locking collar is preferably used for applications where the shaft rotates in one direction only, It can be used for alternating directions as well especially when loads and speeds are low.



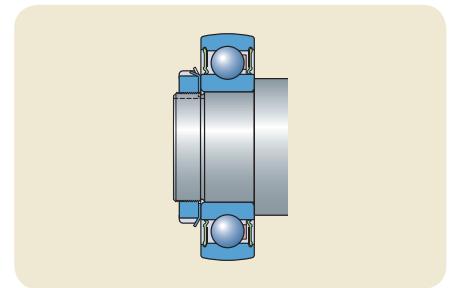
Grub screws

This locking method, well known in agriculture applications, is based on two grub screws positioned 120° apart on the inner ring. The locking is achieved by tightening the two cup point hexagonal grub screws with the recommended torques. This method enables very easy mounting and dismounting, even if space is limited. This locking method is typically used in applications where the shaft alternates direction of rotation.



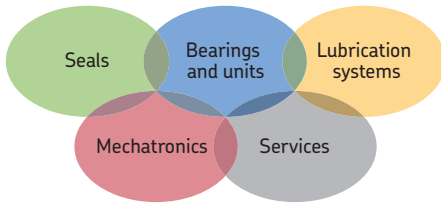
Adapter sleeve locking

This method enables a concentric locking of the Y-bearing unit. The bearing tapered bearing bore (taper 1:12) acts against an appropriate standard adapter sleeve in the H23 series. Provided the same shaft diameter, the bearings with adapter sleeve locking are one size larger than the other Y-bearing series: this features can be exploited when larger bearing rating loads are needed keeping the same shaft diameter.



Interference fit

This locking method is used for Y-bearings in the 17262(00)-2RS1 and 17263(00)-2RS1 series. It is recommended for applications where the direction of the load is alternates and a very smooth running is a key operational parameter.



The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry worldwide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management systems. A global presence provides SKF customers uniform quality standards and worldwide product availability.

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